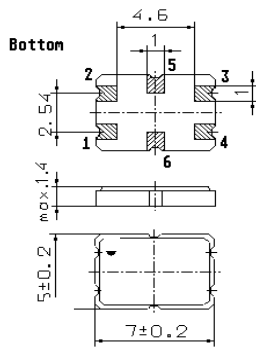


Specification for monolithic crystal filter:

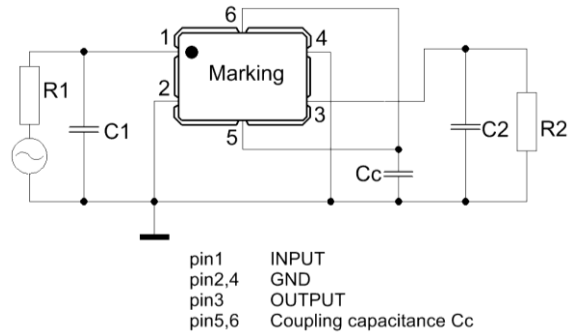
**MQF 21.45 - 3000 / 13**

## 1. General

### 1.1. Package:



GS 2



- |                                   |                   |
|-----------------------------------|-------------------|
| 1.2. Type name:                   | MQF 21.45-3000/13 |
| 1.3. Number of poles:             | 4                 |
| 1.4. Operating temperature range: | -20°C to +70°C    |
| 1.5. Storage temperature range:   | -55°C to +125°C   |

## 2. Electric values

- |   |   |
|---|---|
| 2.1. Nominal centre frequency fo:                       | 21.45 MHz   |
| 2.2. Pass band  |   |
| 2.2.1. Bandwidth between 3 dB - frequencies:            | > fo ± 15.0 kHz   |
| 2.2.2. Ripple:  | < 1.0 dB at fo ± 10.0 kHz   |
| 2.2.3. Insertion loss:                                  | < 3.0 dB  |
| ( measured on smallest attenuation in pass band )       |   |
| 2.3. Stop band  |   |
| 2.3.1. fo ± 50 kHz                                      | > 35 dB   |
| 2.3.2. Alternate attenuation fo ± 910 kHz               | > 70 dB (except spurious)   |
| 2.3.3. Spurious responses fo +100 .... +1000 kHz        | > 30 dB   |
| 2.4. Terminating impedance R/C ( input and output ):    | 3300 Ω // -0.3 pF   |
| 2.4.1. Coupling capacitance Cc:                         | 2.4 pF  |
| 2.5. Input power level for reference measurement:       | +0 dBm  |
| 2.5.1. Maximum input power level:                       | +10 dBm   |
| 3. Marking on the case:                                 | M2145<br>yyww   |
| 4. Environment conditions:                              | corresponding to Vectron standard CF001   |
| 5. Filters are Pb-free and 2002 /95 / EC RoHS compliant |   |
| 6. Reflow soldering for Pb-free assembly:               | > 100°C for maximum 600 seconds<br>> 200°C for maximum 180 seconds<br>> 260°C for maximum 30 seconds<br>( peak temperature )<br>cool - down time: 2 hours |
| 7. Packing:   | Tape and reel , 1000 pcs. / reel  |

Edited by: \_\_\_\_\_ date: \_\_\_\_\_ name: \_\_\_\_\_